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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/365,081	07/30/1999	LEE D. BENGSTON	RIC-99-030	1345

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WORLDCOM, INC.
TECHNOLOGY LAW DEPARTMENT
1133 19TH STREET NW
WASHINGTON, DC 20036

EXAMINER

SHAH, CHIRAG G

ART UNIT	PAPER NUMBER
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2664

DATE MAILED: 03/12/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/365,081

Applicant(s)

BENGSTON ET AL.

Examiner

Chirag G Shah

Art Unit

2664

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 January 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 1, 4-7 rejected under 35 U.S.C. 102(e) as being anticipated by Baniewicz (U.S. Patent No. 6,412,740).

Referring to claim 1, 4 and 6, Baniewicz teaches a distributed restoration method and system for restoring communications traffic flow in response to sensing a failure within spans of the telecommunication network by mapping a topology of a spare capacity. Baniewicz teaches in figures 1 and 2 and respective portions of the specification of a DRA provisioned telecommunications network having a plurality of nodes interconnected with working and spare links. Baniewicz discloses in figures 7 and 8 and respective portions of the specification (column 7, lines 55 to column 9, lines 25) of outputting a message from each spare link of each

Art Unit: 2664

of the nodes to the adjacent node to which the spare link is connected. Baniewicz discloses in claims 7 and 8 and respective portions of the specification of identifying the port number of the node from where the spare link outputs the message and the port number of the adjacent node connected to the spare link where at the message is received. Baniewicz disclose in figure 19, column 12, lines 60 to column 13, lines 18 of storing as data the respective port of the nodes that have connected thereto at least one spare link via which the message is either sent or received, the identities of the nodes and the spare link interconnecting the nodes and generating from the stored data, the topology of spare links interconnecting the nodes of the network. Baniewicz further discloses in figure 12 and respective portions of the specification (column 10, lines 61 to column 11, lines 43) that when a failure occurs in the network, the step of transmitting from custodial nodes of the failed link a broadcast message takes place to downstream nodes to inform downstream nodes that it is a custodial node as claims.

Referring to claim 5, Baniewicz clearly illustrates in columns 5 and 6 of when how a custodial node of a failed link is selected to be an origin node and the origin node utilized the topology of the spare capacity of the network to find an alternate route for the disrupted traffic as claim.

Referring to claim 7, Baniewicz teaches of a distributed restoration method and system for restoring communications traffic flow in response to sensing a failure within spans of telecommunications network. Baniewicz teaches in column 7 and figure 7 and respective portions of specification of identifying return messages that is continuously transmitted and exchanged along spare links between adjacent nodes while a DRA process is not yet in progress as claim.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2 and 3 rejected under 35 U.S.C. 103(a) as being unpatentable over Baniewicz in view of Doshi (U.S. Patent No. 6,130,875).

Referring to claims 2 and 3, Baniewicz teaches of a distributed restoration method and system for restoring communications traffic flow in response to sensing a failure within spans of telecommunications network. Baniewicz discloses in column 4-7 and related sections of the specification of proving the generated topology of the spare links of the network to an origin node for beginning the restoration process if a failure occurs in the network. Baniewicz also discloses in figure 19 and respective portion of the specification where return messages contain information relating to the number of spare links available for connecting the origin node to the destination node, this process is done in iterations and updated continuously. Furthermore, the return message received is the ability to establish at the origin node a map of the restoration network showing where the spare capacity is useable for the restoration. Baniewicz fails to teach of storing data in a central processing means. Baniewicz also fails to teach of storing the updated status in a central processing means, wherein the central processing means uses the updated status to provide a real time topology of the spare capacity of the network. Doshi

Art Unit: 2664

teaches of a hybrid centralized and distributed techniques for restoring communication in a network after a failure in a link, span or node of the network. Doshi teaches in columns 5 and 6 of utilizing the central processor or controller for downloading network connectivity information regarding interconnection between the network nodes in the absence of failures, capacities for at least a subset of the links in the network. Thus, other types of centrally computed information may also be downloaded to the nodes for use in a distributed algorithm. Therefore, it would have been obvious to one of ordinary skill in the art to modify the teaching of Baniewicz to include the teachings of Doshi in order to make more efficient use of spare capacity storage and provide a more efficient real-time discovery based approach for failure scenarios.

Conclusion

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

Or faxed to:

(703) 305-3988, (for formal communications intended for entry)

Or:

(703) 305-3988 (for informal or draft communications, please label "Proposed" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2021 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Chirag G Shah whose telephone number is 703-305-5639. The examiner can normally be reached on M-F 7:30 to 4.

Art Unit: 2664

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin can be reached on 301-305-4366. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

cgs
February 27, 2003

W. Chin